



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0411; Product Identifier 2017-NM-157-AD;

Amendment 39-19376; AD 2018-17-22]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Airbus SAS Model A319-115 and -132 airplanes, and Model A320-214, -216, -232, and -233 airplanes. This AD was prompted by a report indicating that certain modified airplanes do not have electrical ground wires on the fuel level sensing control unit (FLSCU), which adversely affects the fuel gravity feeding operation. This AD requires modification of the FLSCU wiring. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; phone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: account.airworth-eas@airbus.com; Internet: <http://www.airbus.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0411.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0411; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3223.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus SAS Model A319-115 and -132

airplanes, and Model A320-214, -216, -232, and -233 airplanes. The NPRM published in the Federal Register on May 15, 2018 (83 FR 22426). The NPRM was prompted by a report indicating that certain modified airplanes do not have electrical ground wires on the FLSCU, which adversely affects the fuel gravity feeding operation. The NPRM proposed to require modification of the FLSCU wiring.

We are issuing this AD to address reduced fuel pressure at the engine inlet, potentially resulting in an uncommanded in-flight shutdown when flying at the fuel gravity feed ceiling levels.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0216, dated October 30, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus SAS Model A319-115 and -132 airplanes, and Model A320-214, -216, -232, and -233 airplanes. The MCAI states:

Airbus introduced mod 154327 on A319 and A320 aeroplanes which substituted the pump fuel feed system from the centre fuel tank with a jet pump transfer system, based on the Airbus A321 design. Following the modification introduction, it was discovered that the modified aeroplanes do not have electrical ground signals that replicate those from the deleted centre tank pump pressure switches. These signals are used as part of the fuel recirculation inhibition request logic. Subsequent investigation determined that ground wires had not been installed on the fuel level sensor control units (FLSCU) of post-mod aeroplanes, due to a drawing error on the fuel system recirculation principle diagram. Without these ground wires providing inputs, the FLSCU logic is not correctly implemented for gravity feeding operation.

This condition, if not corrected, could lead to reduced fuel pressure at the engine inlet, possibly resulting in an uncommanded inflight shut-down when flying at the

gravity feed ceiling levels, as defined in the Aircraft Flight Manual (AFM).

To address this potential unsafe condition, Airbus issued AFM Temporary Revision (TR) 695 Issue 1 and AFM TR 699 Issue 1 to prohibit the use of Jet B and JP4 fuel, and AFM TR 700 Issue 1 to provide instructions for amendment of the gravity feed procedure for the other fuels.

Consequently, EASA issued AD 2016-0205 [which corresponds to FAA AD 2016-25-23, Amendment 39-18749 (81 FR 90971, December 16, 2016) (“AD 2016-25-23”)], requiring amendment of the applicable AFM to include the new gravity feed procedure and to reduce the list of authorised fuels.

Since that [EASA] AD was issued, Airbus developed a wiring modification to restore the intended FLSCU logic, and issued Service Bulletin (SB) A320-28-1242, later revised, providing instructions to modify affected aeroplanes.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2016-0205, which is superseded, and requires modification of FLSCU wiring. This [EASA] AD also allows, after that modification, to remove the previously inserted AFM TR’s from the applicable AFM.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0411.

Comments

We gave the public the opportunity to participate in developing this final rule. We have considered the comment received. The Air Line Pilots Association, International (ALPA) stated that it supports the NPRM.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the

changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR part 51

Airbus SAS has issued Service Bulletin A320-28-1242, Revision 01, dated October 3, 2017. The service information describes procedures for modification of the FLSCU wiring. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 58 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
14 work-hours × \$85 per hour = \$1,190	\$204	\$1,394	\$80,852

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not

control warranty coverage for affected individuals. As a result, we have included all known costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2018-17-22 Airbus SAS: Amendment 39-19376; Docket No. FAA-2018-0411; Product Identifier 2017-NM-157-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD affects AD 2016-25-23, Amendment 39-18749 (81 FR 90971, December 16, 2016) (“AD 2016-25-23”).

(c) Applicability

This AD applies to Airbus SAS Model A319-115 and -132 airplanes, and Model A320-214, -216, -232, and -233 airplanes, certificated in any category, all manufacturer serial numbers on which Airbus modification 154327 has been embodied in production, except those on which Airbus modification 158740 has been embodied.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Reason

This AD was prompted by a report indicating that certain modified airplanes do not have electrical ground wires on the fuel level sensing control unit (FLSCU), which adversely affects the fuel gravity feeding operation. We are issuing this AD to prevent reduced fuel pressure at the engine inlet, potentially resulting in an uncommanded in-flight shutdown when flying at the fuel gravity feed ceiling levels.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Modification

Within 24 months after the effective date of this AD, modify the FLSCU wiring in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-28-1242, Revision 01, dated October 3, 2017.

(h) Terminating Action for AD 2016-25-23 and Amendment of the Airplane Flight Manual (AFM)

Modification of an airplane as required by paragraph (g) of this AD terminates all of the requirements of AD 2016-25-23 for that airplane. After modification of an airplane as required by paragraph (g) of this AD, remove Airbus A318/A319/A320/A321 Temporary Revision TR695, Issue 1.0, dated August 1, 2016; or Airbus A318/A319/A320/A321 Temporary Revision TR699, Issue 1.0, dated August 1, 2016; as applicable; and Airbus A318/A319/A320/A321 Temporary Revision TR700, Issue 1.0, dated August 1, 2016, from the applicable AFM of that airplane.

(i) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-28-1242, dated December 21, 2016.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International

Section, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0216, dated October 30, 2017, for related information. This MCAI may be

found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0411.

(2) For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3223.

(I) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Service Bulletin A320-28-1242, Revision 01, dated October 3, 2017.

(ii) Reserved.

(3) For Airbus SAS service information identified in this AD, contact Airbus SAS, Airworthiness Office – EIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; phone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: account.airworth-eas@airbus.com; Internet: <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on August 17, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

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